

REMARKS/ARGUMENTS

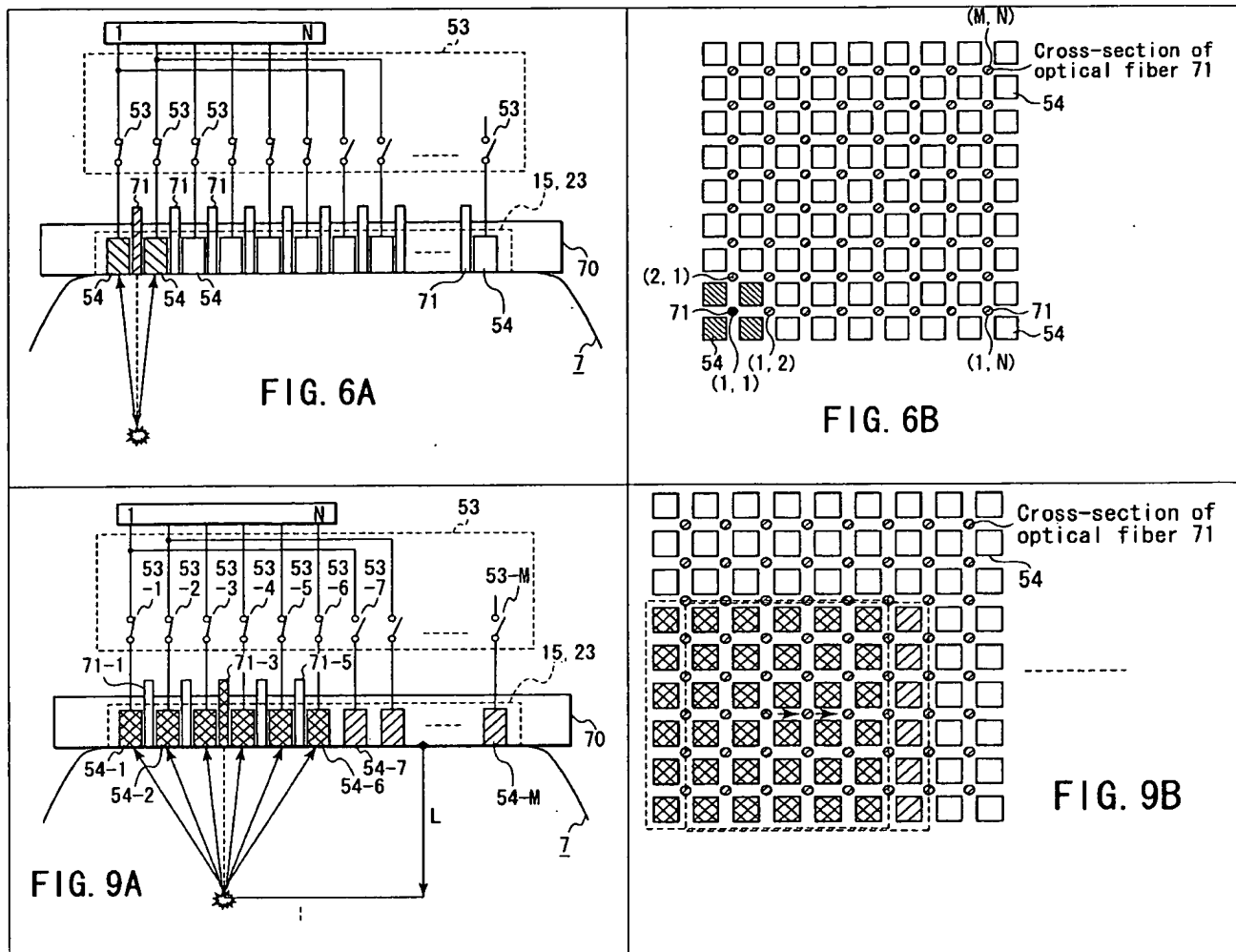
Favorable reconsideration of this application as currently amended and in view of the following remarks is respectfully requested.

Claims 1,3, 7-16, 19, 20, 31, and 32 are currently active in this case. Claims 1, 3, 9, 11, 12, and 16 have been amended by the current amendment. No new matter has been added.

In the outstanding Office Action, Claim 1-3 and 5-20 were rejected under 35 USC 103(a) as being unpatentable over Kruger in view of Unger et al and Chen et al.

The present invention (claim 1 as amended) is directed to a non-invasive imaging apparatus including, among other things, optical scanning means for sequentially irradiating the subject with light from a plurality of end portions of a plurality of optical fibers. The plurality of optical fibers are two-dimensionally laid in gaps between a plurality of conversion elements such that each optical fiber is surrounded by four adjacent conversion elements. The irradiation unit is formed from a plurality of end portions of the plurality of optical fibers, and a reception means generates a reception signal corresponding to acoustic waves generated by irradiation of the light, from electrical signals from a predetermined number of conversion elements adjacent an end portion of the optical fiber which has radiated the light.

Compare, by way of non-limiting example, Figures 6A and 9A and 6B and 9B, respectively, of the Specification. In Figure 6A, the optical fiber 71 with cross-hatching irradiates the light while the remaining optical fibers are off. In Figure 9A, the optical fiber 71-3 with cross-hatching irradiates the light while the remaining optical fibers are off. Figure 6B illustrates that the predetermined number of conversion elements 54 adjacent to the optical fiber irradiating light is 4 (2 x 2). Figure 9B illustrates that the predetermined number of conversion elements 54 adjacent to the optical fiber irradiating light is 36 (6 x 6).



Pages 5 and 6 of the Official Action assert that Kruger discloses scanning means for *sequentially irradiating the subject with light from said plurality of end portions of said plurality of optical fibers* as required by amended claim 1. Applicants respectfully traverse. Kruger does not teach or suggest means for selecting one by one (i.e., sequentially) end portions of optical fibers used to irradiate a subject. The rotation of the waveguides merely changes the location of the irradiation and the corresponding reception. No selection functionality is employed.

Unger et al merely suggests a plurality of optoacoustic transducer configurations, but fails to teach or suggest scanning means as defined by claim 1. Chen et al. is merely relied

upon to teach an optical parametric oscillator. Neither Unger et al. nor Chen et al. is believed to remedy the deficiencies of Kruger.

In view of the foregoing, Kruger is not believed to anticipate or render obvious the subject matter defined by claim 1 when considered alone or in combination with Unger et al. and/or Chen et al.

Claim 16 is directed to a non-invasive subject imaging method and similar to claim 1 defines that the light is sequentially radiated from a plurality of light irradiation positions. Thus, claim 16 is also believed to be allowable.

The active dependent claims are believed to be allowable for at least the same reasons the respected independent claims are believed to be allowable.

In view of the foregoing no further issues are believed to remain. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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